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A sustainable model for a university-industry learning partnership: Issues for universities

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A sustainable model for a university-industry learning partnership: Issues for universities

Abstract: Using work integrated learning (WIL) in university-industry learning partnerships as a means of developing the deeper and more complex skills of managers is receiving growing interest in the literature. This paper suggests that there are, currently, two basic approaches to WIL – the traditional model and the customisation model. While each has strengths, each also has limitations. Responding to the call of Patrick et al (2008) for more discussion and research on WIL stratagems, this paper proposes a third model – the sustainable learning partnership - as an option to encourage deeper, more complex and more long-term capacity building in management development.

Keywords: work integrated learning; work based learning; andragogy; tacit knowledge

This paper was influenced by the recommendations of *The WIL* [work integrated learning] *Report* (Patrick, Peach, Pocknee, Webb, Fletcher & Pretto, 2008), especially Recommendation No.2, which stated: *Stakeholders* [should] *consider collaborative research into WIL curriculum and systems that enable sophisticated and sustainable partnerships.* In particular, the paper contributes to two of the priority actions of the report for Strategy *3: WIL curriculum and pedagogy* – (a) Investigate and trial a range of WIL approaches and (b) Identify ways to increase curriculum flexibility to enable participation by greater numbers of students and employers.

Specifically, this paper concentrates on contributing to the discussion on creating sophisticated and sustainable partnerships. Hamilton and Hamilton (1997) identify a number of WIL approaches including visits to workplaces, work-like experiences, apprenticeships and co-operative education. These approaches, though, are usually firmly ensconced within the traditional programs of most universities – for example, as a practicum or work experience. We will refer to these approaches as the traditional model of WIL. An advance on this traditional approach is the customised WIL program – where the content of the official units are revised and amended so that there is a better alignment of learning curriculum to real work tasks in the organisation or industry (Symes & McIntyre, 2000; Tennant, 2000). These customised WIL programs aim to use the authentic learning environment of the workplace to provide experiences that are not teachable in other environments (Symes & McIntyre, 2000; Billett, 2007). The customised approach, though, has its own set of limitations. This paper, therefore, proposes a third model, the sustainable learning partnership model to engender further discussion on WIL approaches as a means of increasing curriculum flexibility.

The paper examines a commencing trend of developing managers through WIL before discussing the concept. The paper then briefly reviews the results of two WIL programs with which the authors have facilitated and have previously published (Choy & Delahaye, 2008; Delahaye & Choy, 2008; Delahaye & Choy, 2007). Reflections on the authors' experiences with two programs and the evaluations of the programs are discussed to highlight issues for achieving sustainable learning partnerships for WIL.

Management development

Generally, management development is perceived by both organisational leaders and academics as one of the most effective ways to improve skills in all areas of management, increase productivity and change corporate structure (Terrion, 2006). Luoma (2005) suggests that the key to developing managers is integrative management development which combines both formal and informal learning, focuses on key elements of current strategy, and benefits both individuals and the organisation. This stance on integrative learning is strongly supported by Enos, Kehrhahn and Bell (2003) and Jackson, Farndale and Kakabadse (2003), and can be suitably achieved through WIL.

Buckley and Monks (2005) believe that there are three options for developing managers. The first, at the micro-level, tends to focus on 'near transfer' of behavioural and visible skills. The second, at the meso-level, concentrates on pre-identified management competencies such as team building, conflict resolution and decision making. The third, macro-level approach encompasses a significant perspective shift to higher order thought such as double-loop thinking, strategic reorientation and developing learning organisations. Inherent in this third level approach is the suggestion that more sophisticated developmental strategies are needed. Buckley and Monks (2005) go on to comment that this third level emphasises the development of perspectives and orientations which may or may not have direct application in the short term or medium term – that is, the focus is on 'far transfer'. Appropriately designed WIL can potentially lead to all three levels.

In summary, then, the direction of present-day management development favours integrative learning that combines both formal and informal learning and uses more sophisticated learning strategies to develop higher order thinking that enables managers to operate under what Stacey (2007) calls 'far-from-certainty' conditions.

Work integrated learning

The *Business, Industry and Higher Education* report on graduate employability (Cleary, Flynn, Thomassson, Alexander & McDonald, 2007) strongly advocated WIL as a mechanism to develop graduate attributes and employability skills. As an authentic learning site, the workplace provides a context for learners to transform and construct vocationally and socially meaningful knowledge and skills (Billett & Boud 2001; Brown, 1998). Further, Ellstrom (2001) points out that the arguments for the importance of WIL are not limited to economic considerations, as the conditions that promote learning at work are also instrumental in reducing stress and promoting healthier working conditions.

Patrick et al (2008) define WIL as an umbrella term used for a range of stratagems that integrate theory with the practice of work within a purposefully designed curriculum. The expectation of learners in such programs is to identify and, where possible, apply relevant theory, acquire knowledge of the organisation/industry in which they are working and recognise the role of ethics in business.

Billett (2001b) identified the strengths of learning through workplace experiences - including access to authentic work activities and more experienced co-workers, and opportunities to practise, reinforce and refine. It is these workplace experiences that lead to the deeper levels of the macro-approach to learning, identified by Buckley and Monk (2005) as essential to management development. In refining the differentiation between explicit and tacit knowledge (Polanyi, 1962), Anderson (1982) differentiates between declarative knowledge (concepts, facts, propositions and the interlinked associations between these), procedural knowledge (knowledge and skills used to do things, is not as easily declared because much of it is tacit in nature) and dispositional knowledge. Dispositional knowledge comprises interests and beliefs – very similar to the frames of reference suggested by

Mezirow (2009), which form the deep values and belief systems of an individual (Perkins, Jay & Tishman, 1993). WIL, then, focuses predominantly on dispositional knowledge and procedural knowledge. It is no surprise, then, that industry and workers recognise this and expect a closer alignment of university learning curriculum to real work tasks so that as knowledge workers they are better prepared for a knowledge economy (Symes and McIntyre, 2000; Tennant, 2000).

To satisfy the demands of their contemporary clients and to meet the challenges of WIL there is a move towards customised university-based management development programs (Doncaster, 2000). Of importance, though, is these customised, company-specific programs are designed to meet a predetermined set of company-specific needs (Sims, 2006) and also those of the individual students. Such customised WIL programs can be problematic, as the alignment of curriculum and real work tasks is often complicated and challenging, especially for universities, because there are no pre-existing maps that chart the territories of knowledge in academia and industry (Boud & Symes, 2000).

Two WIL programs

The authors were involved in two postgraduate programs that were customised to meet client needs – one in 2006-2008 and the other in 2008-2009. The first partnership was with a Non-Government Organisation (NGO) employing 45 staff distributed across the state of Queensland in Australia. Its clients were volunteer groups who had access to government funding. The second partnership was with a government department responsible for vocational education and training (VET) in a state of Australia. Of significance to the design of these programs was the clients' wish that the programs would result in some strategically defined changes for the organisation. This need for strategic change took the proposed WIL programs past the traditional model of WIL to a more work embedded and embodied learning program. That is, the programs had to not only develop the worker-learners but also change the organization towards the desired strategic direction.

To address the complexities and challenges raised by Boud and Symes (2000), the authors used a number of guidelines, suggested by the literature, to customise existing academic units. These

guidelines have been the topic of previous publications (Delahaye & Choy, 2008; Delahaye & Choy, 2007). Briefly, the guidelines were - the academic units were selected and then customised based on the strategic needs of the organisation (Sims, 2006); the learning and assessment used andragogical principles, where learners took responsibility for their learning, to encourage the worker-learners to accept responsibility of converting the theoretical concepts into work-based change (Knowles, Holton & Swanson, 2005); maximised the use of both formal learning (online and face-to-face workshops) and informal learning (through peer interaction, one-on-one discussions with the academics and presentations to work colleagues) (Enos et al, 2003; Jackson et al, 2003); used learning cohorts with each cohort focusing on specific strategic change interventions; and ensured that the assessment was clearly and strongly linked to the strategic change required by the organisation. Four units - Leadership for Change; Politics of Diversity and Identity; Knowledge Management; and Changing Agendas in Leadership - were packaged for the Graduate Certificate

Of course, using WIL programs is not unproblematic. The authors were also mindful of the concerns raised by Billett (2001b) about work-based learning – these concerns included learning bad habits, experiences that are so personally confronting that they inhibit personal development, lack of support and lack of opportunities to practise.

Evaluation of the WIL programs

The first case (the NGO) was evaluated by the authors using an internal research grant from the university. The evaluation report was reviewed by the CEO and the senior management group of the NGO to confirm validity. The results of the evaluation have already been published (Choy & Delahaye, 2008). Generally, the results of the evaluation indicated that (a) the WIL program did achieve the pre-determined strategic goals, (b) the required strategic changes had been largely embedded in the organisation, (c) the development of a learning organisation culture, (d) the use of the learning cohort approach was integral to the success of the program and (e) the use of andragogical principles as part of the WIL process was generally well endorsed. Two main concerns were highlighted in this first case. The first related to the disruptive nature of the program. In

particular, arranging for a suitable time and location for the learning cohorts to meet regularly was problematic. Billett (2001a) explains these types of issues in terms of work place affordances – the degree to which learners are invited and supported in their learning - and emphasises the need for learning spaces in WIL. The second concern related, to an extent, to the andragogical design. Some participants felt that there had not been sufficient clarity of what was expected of them as learners.

The second case (the government department) was evaluated by a third party funded by the government department. While the full evaluation report must remain confidential, some of the results can be described in this paper. A high proportion of the participants reported a significant increase in personal development, the development of a series of strong learning networks within the learning cohort and a rich source of materials for future reference (the knowledge reservoirs of Debowski, 2006). The use of learning cohorts and the effective use of technology were seen as integral to the highly supportive course structure used. Suggested improvements to the design included enlisting the active support of the participants' supervisors, encouraging the participants to share and apply their learning and having the participants engage directly in policy development and analysis.

Reflections of the authors

The authors reflected on the results of these evaluations and also on their experiences with the WIL programs over the three year period. There was no doubt that the customised programs did have a high level of success for both cases. Change did occur in the pre-defined directions planned by both organisations. However, as suggested earlier in the paper, the alignment of curriculum and real work tasks is often complicated and particularly challenging.

For the authors, the first limitation of customisation was the perception by the clients that we were in a vendor model where the clients were supposedly purchasing a solution. The warnings of Wright (2008) about a vendor relationship certainly came true as there was an expectation that, for the money they paid, we would be providing a solution and that, like other commodities they purchase, they did not see the need for them to invest too much time or effort to work together with us.

The second limitation, and linked to the first, was the organisations expected us to be experts and solve their organisational problems. Despite several meetings, these problems were difficult to define within the short timeframes we had for customisation. There were several issues here. First, as cultural outsiders it was difficult to fully grasp the organisational sub-cultures, what was valued and how learning was perceived or used as a tool for change management. Second, there were differences between the intended and emergent strategic directions within the organisations and there were, at times, different understandings among the senior managers on the strategic direction of the organisation. Third, there were instances where the managers could not make explicit the nature of the problem that could be addressed through learning.

The third limitation was caused by only senior managers being engaged in the initial discussions and working with us on the customisation. On reflection some of these managers were a little removed from the functions of staff who participated in the WIL. Hence there were suggested aspects of customisation that did not necessarily match with roles and responsibilities of the participants. Linked to the third, the fourth limitation was that the learners did not necessarily feel committed to the program as the decisions on customisation (the content and the learning strategies to be used) were made by senior management. Some joined so that they would not be the "odd person out". The fifth limitation was based on the general perception that the time invested in the customisation and the attendance of learners at workshops was the only investment required. At times there was little attention to, or acknowledgement of, the need to invest in workplace affordances so that the learning could be embedded into the organisation's processes and culture. Lastly, although the initial meeting to discuss customisation took place at the beginning of the semester, the organisations experienced a number of changes in the six months of the semester. Because much of the customisation was locked in at the beginning of the semester, we found we were somewhat restricted to the original agreements under a 'perceived' contract.

From the evaluations and our personal deliberations, we came to the conclusion that the organisations in the two case studies wanted a deeper, more complex and more long-term solution and the six concerns described above hindered this outcome to an extent. On reflection, the academic facilitators needed to be able to move the clients' perception and expectations beyond the vendor assumptions to a more mutually agreed and combined responsibility, where the ownership of the learning materials is shared. Therefore, given that the customised model of WIL is an extension of the traditional model of university education, we are suggesting that there may be a third model of WIL that extends beyond the limitations of customised WIL.

A sustainable learning partnership model

The sustainable learning partnership model of WIL is an extension of the customised model and, therefore, shares a number of characteristics. These shared characteristics include (a) commencing with wide-ranging negotiations with the senior management of the organisation, sometimes for six to nine months, (b) the academic facilitators gaining an extensive understanding of the strategic plan and desired strategic direction of the organisation (see Sims, 2006), (c) each party gaining familiarity with the intentions, resources and limitations of the other (see Sherwood & Coven, 2008) (d) the identification of organisational members who will become the learning cohort (e) the curriculum being designed on andragogical principles (see Knowles et al, 2005) for the acquisition of predominantly non-codified tacit knowledge (see Sherwood & Coven, 2008 and Regans & McEvily, 2003) and (f) an evaluation of the project.

There are two basic tenets for the sustainable learning partnership. First of all, the responsibility for learning and capacity building must be shared equally between the organisation and the university. In addition, the curriculum design should focus on capacity building for deep learning so that the skills and knowledge can be used for sustainable learning even after the completion of the study program. Learning needs to be embedded in appropriate pedagogies (Duignan, 2002). These basic tenants are the defining difference between the customised model of WIL and the sustainable learning partnership model. The areas where the sustainable learning partnership model differs and expands on the

customised model can be reviewed under two headings – the university context and the process of developing and conducting the program.

The university context

For the university, the first key to a sustainable learning partnership is a willingness to move away from the purchaser/provider or vendor model. The charging of an additional impost, that universities see as the attraction of the WIL model, tends to reinforce the notion of a vendor relationship. As Wright (2008) reports 'seeing a university as a vendor rarely produces significant outcomes for a corporation" (p.76). In addition, as the authors found with their experiences in the two WIL case studies, the vendor relationship tends to also reinforce the notion that the university must produce exact solutions to the problems identified. However, while losing financial income may appear to be detrimental, the university is reimbursed in a number of alternative ways when moving to the sustainable model. Firstly, new markets are opened, with the concomitant increase in enrolments. Its contribution to capacity building of worker-learners (as critical, analytical and reflective thinkers) is far more valued. Secondly, as a sustainable learning partnership, this increase in enrolments is likely to be a continual source of additional student numbers. Thirdly, there is the considerable advantage of the development of the academic facilitators. As Brookfield (2005) notes, self-directed learning often results in the knowledge development of both the learner and the facilitator. In short, the university academics' industry knowledge is continually updated under a sustainable partnership model as they engage in problem solving with the work-learners.

The second key for the sustainable learning partnership model is based on ensuring that the academics are experienced in facilitating unstructured or self directed learning. Because they are moving away from the traditional model, which tends to emphasise delivery of coded explicit knowledge, the academic staff need highly developed skills in facilitating the process for change management (see Schein, 2008) and in developing self-directed learners (see Brookfield, 2005 and Knowles et al, 2005). In addition, the academic facilitators need to be highly knowledgeable in the areas of strategic

management and management development. For universities, developing the facilitators to this level of skill may be a challenge as such development takes a lot of financial investment and time.

The third key is for changes in the university processes and systems to adequately accommodate WIL. Most processes and systems were established for the traditional model and based on the assumption that the university was the primary custodian of knowledge. So, for instance, new work load formulae need to be considered where academic staff are allocated time for meetings with industry and where necessary, travel time to the worksites. Meetings with industry should be part of the job, not costed as consultation. Close attention needs to be paid to the enrolment and payment procedures. This was one of the strengths of the university involved in the two case studies, but the success of these two vital procedures did rely on the expertise and commitment of one staff member. The authors recommend a 'case manager', usually an academic, who can guide and navigate the industry partner through the university system terrain. An efficient approval mechanism will be needed to endorse the changes to content and assessment of the official unit programs, yet maintain the academic standards. As traditional processes could take up to several months, this third change may take the form of an executive decision by higher management in the appropriate faculty.

In summary, the three key issues that need to be considered in the university context are: moving forward from the vendor model; using academic facilitators who have the requisite complex facilitation skills; and revamping some current administrative processes and systems. From the university perspective, these three key issues provide observable evidence that the university is supporting the basic tenants for a sustainable learning partnership – a willingness to share equal responsibility for learning and capacity building.

The process of developing and conducting the program

Underpinning the process of developing and conducting the sustainable learning partnership for WIL program is continuous, open and non-defensive communication. As Patrick et al (2008) urge, there must be a clear understanding of stakeholder expectations through increased dialog and interaction

between universities, employers and peak bodies. This shared understanding of expectations must be two way – the university of the organisation and the organisation of the university.

As the fourth key issue, then, there needs to be an on-going and open dialogue between the senior management of the organisation and the academics (see Wright, 2008). This dialog will rely on at least three sub-issues. First, there needs to be a thorough and communal understanding of the strategic plan and direction of the organisation. Of importance will be an acceptance of Mintzberg's (2003) notion of intended and emergent strategies – and the complexities and flexibilities surrounding such discussions. Second, the need for the organisation to plan and establish workplace affordances (Billett, 2001a) – the physical spaces, resources and the time needed by the learners. Third, deciding how the WIL project will become part of the performance appraisal process, so that the changes can be identified and categorised.

The fifth key issue centres on the worker-learners. It is essential that all the potential worker-learners are incorporated in the discussions as soon as the strategic and macro decisions have been made by the senior management and the academic facilitators. Initially, they will need to become involved in the macro-curriculum decisions, such as the content to be covered and the logistics of how learning will be organised. However, the emphasis must be on the content of non-codified tacit knowledge (Sherwood & Covin, 2008) and the use of strong ties for learning strategies (Regans & McEvily, 2003). Because of the interactive and integrated nature of the sustainable learning partnership model, there may be a grey area between the worker-learners' involvement in the curriculum design and enrolment in the university.

The sixth, and final, key issue relates to the relationship between the worker-learners and the academic facilitators. A critical part of the sustainable learning partnership is the emphasis on the academics and worker-learners functioning together and using learning as a way to help organisations achieve strategic changes (see Sims, 2006). This collaboration may entail on-going changes to both the curriculum content and learning strategies where the worker-learners add to the agreed curriculum

design while the facilitators guide them. There is a focus on developing learning resources and on lifelong learning (Knowles et al, 2005) with an emphasis on creating new knowledge, not just perpetuating current knowledge. Above all, this process respects the expertise of the worker-learners by not assuming that academics are the main and only experts.

Conclusion

WIL is attracting growing interest as a means of developing managers. This paper has suggested that, until now, there have been two broad approaches – the traditional approach and the customisation approach which also serve the economic imperatives. While each has its strengths, neither encourage the deeper, more complex and more long-term capacity building to move the learning partnership beyond the vendor relationship to a more mutually agreed and combined responsibility. Accordingly, this paper has proposed a third model, called the sustainable learning partnership model of WIL with the intent of fostering further discussion, as recommended by Patrick et al (2008). This sustainable model suggests both parties co-produce curriculum and co-design pedagogies where both are contributing, although university monitors the quality and awards the degree. The learning takes place at two levels: organisation to organisation (industry and university) and individual (worker-learners and academics).

When entering into a sustainable learning partnership, universities should consider six issues – a willingness to move away from a vendor relationship; using academics with the requisite complex skills; redesigning administrative processes to react efficiently to the flexibilities required; initiating and maintaining an on-going and open dialogue with the organisational senior management; ensuring a high involvement of the worker-learners in the planning, design, implementation and evaluation of the program; and the relationship between the worker-learners where they function equally to create new knowledge and embed this so that the pre-determined strategic changes are achieved. As the sustainable learning partnership is an extension of the customised WIL model, the significant difference between the two is the emphasis on the shared responsibility for learning and capacity

building. In addition, in the sustainable learning partnerships, the curriculum design emphasises capacity building for deep learning based on complex tacit knowledge.

Finally, one limitation on using the material from the two case studies used in this paper should be acknowledged. The two case studies focused on the postgraduate level. This focus may have allowed the two WIL programs to concentrate on critical, analytical and reflective thinking and also capacity building for the organisation, as the participants may have been more familiar with these deeper learning processes. As one option for furthering future discussion, research may benefit by including undergraduate participants in a sustainable learning partnership.

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